

FIG. 1A

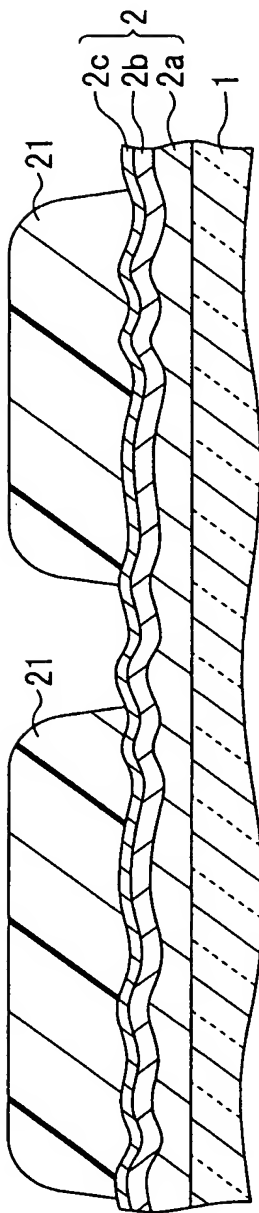


FIG. 1B

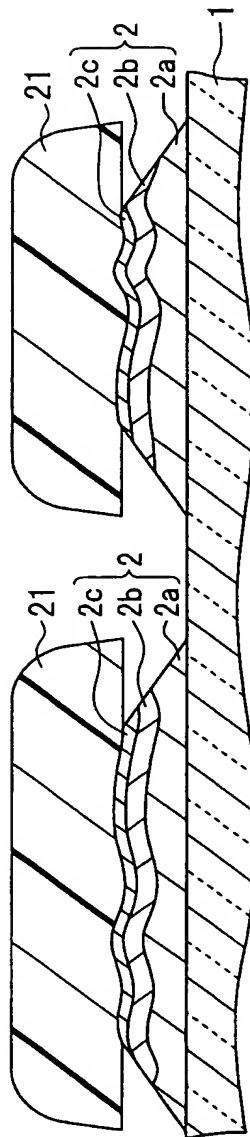


FIG. 1C

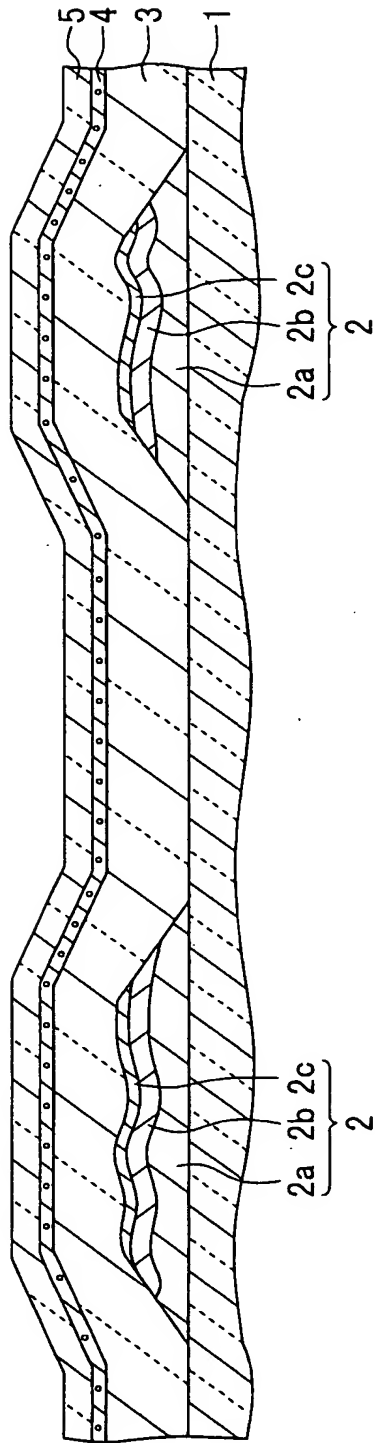


FIG. 1D

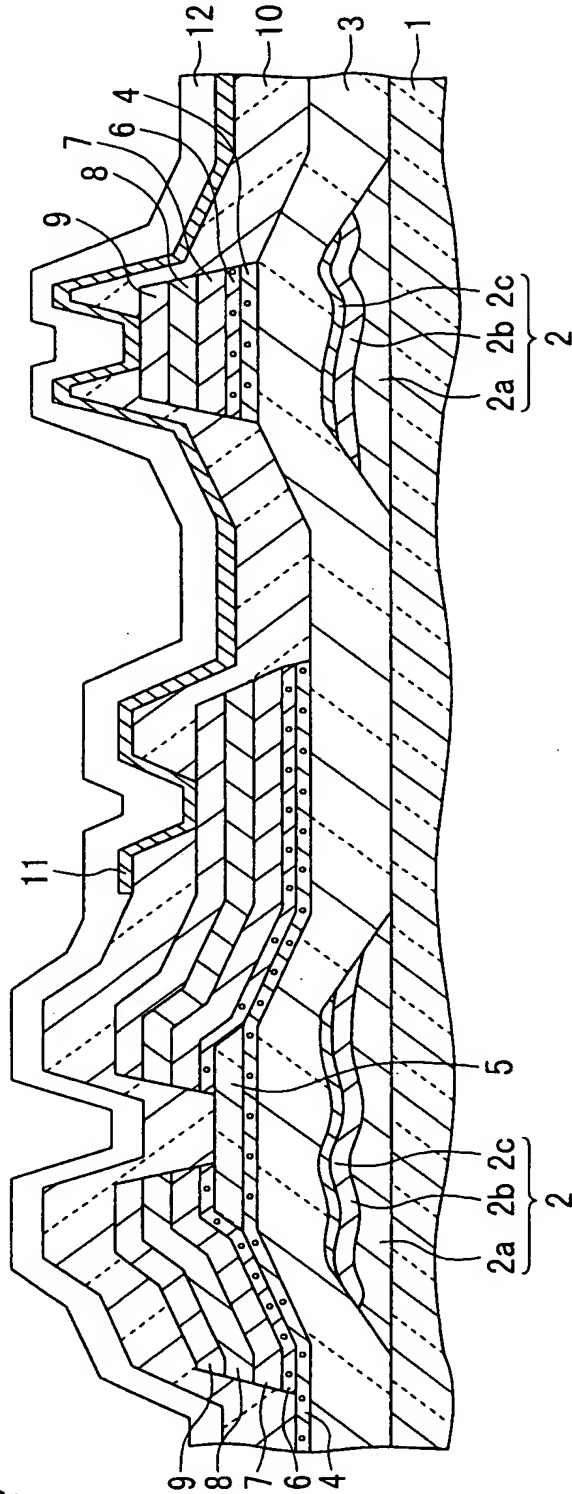


FIG. 1E

FIG.2

| | | NUMBER OF WHISKERS FORMED ON EACH SUBSTRATE | SURFACE ROUGHNESS Ra (nm) |
|----------|-------------------------------|---|---------------------------------|
| SAMPLE A | SUBSTRATES WITH HEATING | 0 | 3.39 |
| SAMPLE C | SUBSTRATES WITHOUT HEATING | 203 | 0.99 |

FIG.3A

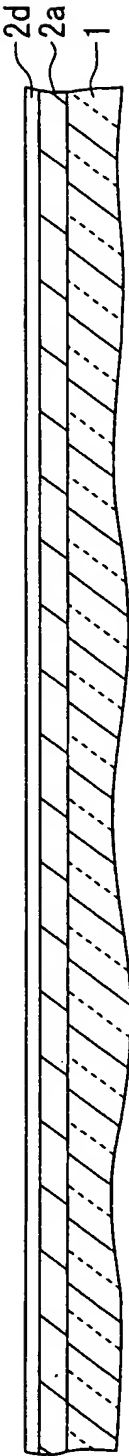


FIG.3B

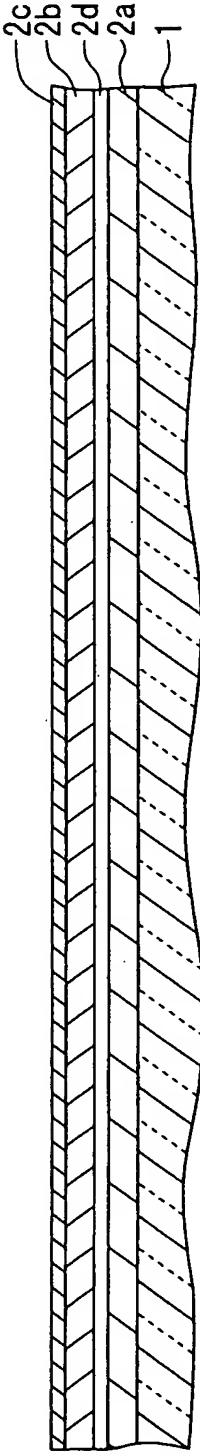


FIG.3C

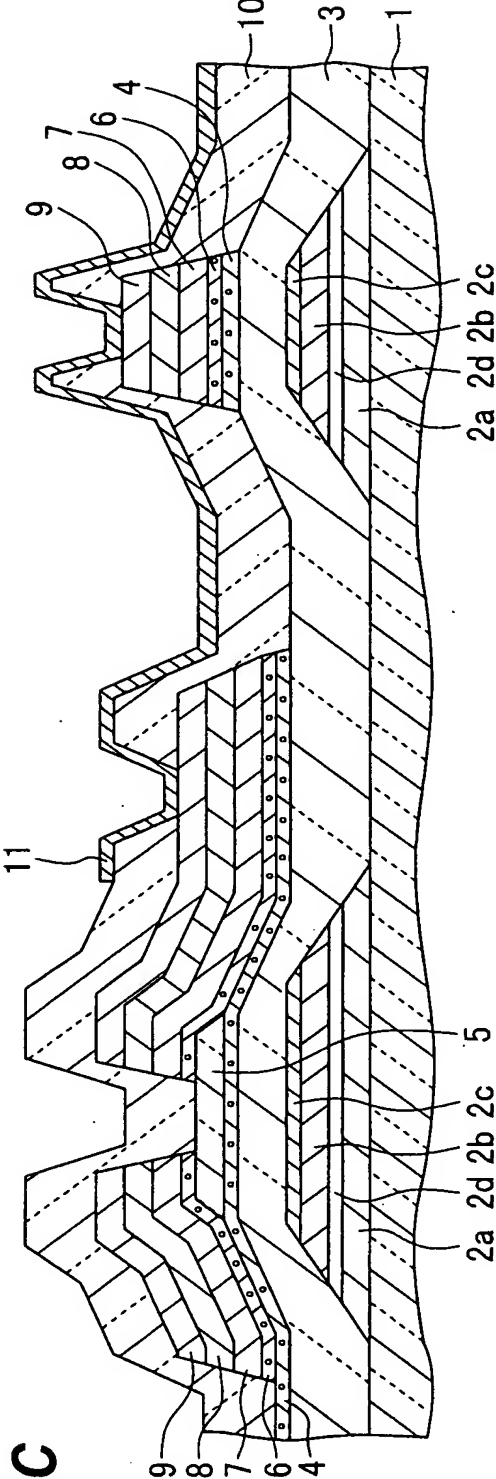


FIG.4

| | | NUMBER OF WHISKERS FORMED ON EACH SUBSTRATE | STRESS (MPa) |
|----------|---------------------------|---|-----------------|
| SAMPLE B | WITH Al OXIDE LAYER | 0 | 83.4 |
| SAMPLE C | WITHOUT Al OXIDE LAYER | 203 | 212.3 |

FIG.5A

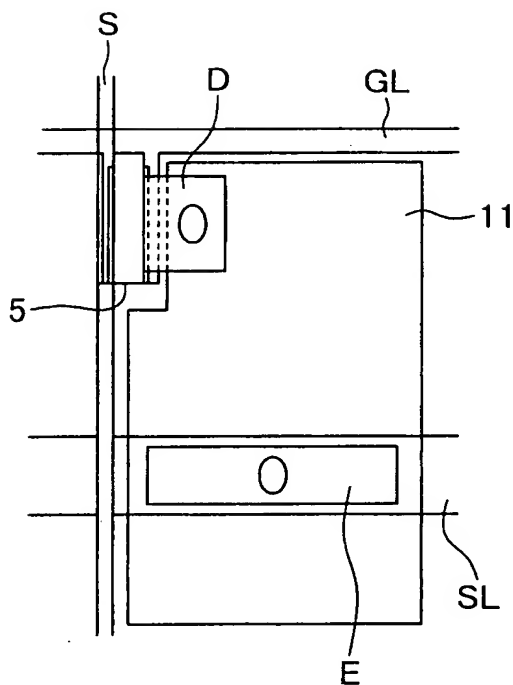


FIG.5B

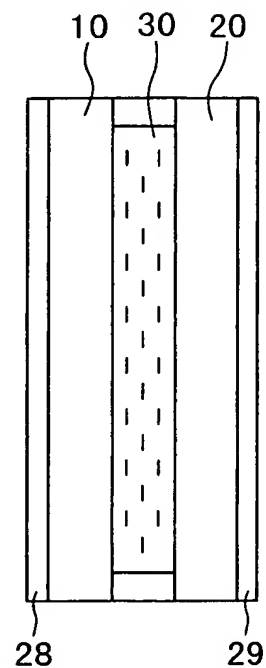


FIG.5C

